
Public Health Reports

VOLUME 60

NOVEMBER 2, 1945

NUMBER 44

IN THIS ISSUE

Increase of Rat Infestation on Vessels Coming to New York
A Report on the Increase of Rat Infestation on Oil Tankers
Report on Proposals for a National Research Foundation
Modified Rabbit Box Trap for Catching Live Wild Rats
Damage to Fabric by Hydrocyanic Acid Gas in Fumigation



CONTENTS

	Page
Increase of rat infestation on vessels coming to New York. Robert Olesen.....	1295
Increase of rat infestation on oil tankers. Robert Olesen and J. L. Stone..	1296
National Advisory Health Council and National Advisory Cancer Council of the Public Health Service. Joint report on proposals for a National Research Foundation.....	1301
A modified rabbit box trap for use in catching live wild rats for laboratory and field studies. Curt P. Richter and John T. Emlen, Jr.....	1303
A report on damage to fabric by liquid hydrocyanic acid gas in fumigation. G. C. Sherrard.....	1308
Prevalence of communicable diseases in the United States, September 9-October 6, 1945.....	1310
PREVALENCE OF DISEASE	
United States:	
Reports from States for week ended October 13, 1945, and comparison with former years.....	1314
Weekly reports from cities:	
City reports for week ended October 6, 1945.....	1318
Rates, by geographic divisions, for a group of selected cities....	1320
Foreign reports:	
Canada—Provinces—Communicable diseases—Week ended September 22, 1945.....	1321
Reports of cholera, plague, smallpox, typhus fever, and yellow fever received during the current week—	
Plague.....	1321
Smallpox.....	1321
Typhus fever.....	1322
Yellow fever.....	1322
Deaths during week ending October 6, 1945.....	1322

Public Health Reports

Vol. 60 • NOVEMBER 2, 1945 • No. 44

Printed With the Approval of the Bureau of the Budget as Required by Rule 42
of the Joint Committee on Printing

INCREASE OF RAT INFESTATION ON VESSELS COMING TO NEW YORK¹

By ROBERT OLESEN,² *Medical Director, United States Public Health Service*

The destruction by hydrocyanic acid gas of considerable numbers of rats on vessels coming to New York from foreign ports has directed attention to the increased infestation of such craft and the potential danger to the United States. The necessity for constant surveillance over these vessels and their prompt fumigation when this procedure is indicated is clearly shown by recent experiences. Among the infested vessels lately encountered in New York was a freighter, which arrived with a history of having visited several foreign ports known to be or suspected of being plague infected. This vessel had called at several such places. Upon arrival in New York a preliminary routine survey made by trained inspectors during the routine quarantine inspection disclosed evidence of "many rats." The vessel carried an unvisaed exemption certificate from the authorities in a foreign port, certifying that conditions in that port and on the vessel were satisfactory to the officials.

In New York a further and more detailed sanitary inspection was made to determine whether the preliminary estimate of infestation was sufficient to warrant fumigation of the vessel. An experienced sanitary inspector from the New York quarantine station found that the infestation was extensive, a preliminary estimate of "more than 200 rats" being made.

The vessel was fumigated with hydrocyanic acid gas on February 27, 1945, the result being the destruction of at least 384 rats. All of the dead rodents were found in the holds and none was discovered in living quarters, storerooms, and other compartments of the vessel.

In this connection it has been interesting and also disconcerting to note a considerable increase in the number of rats destroyed by fumigation on vessels during the past few months. Apparently there has been a relaxation in repressive efforts in several of the foreign countries

¹ From the Foreign Quarantine Division.

² Chief Quarantine Officer, U. S. Quarantine Station, Rosebank, N. Y. (Deceased, Aug. 16, 1945.)

visited by vessels prior to entry into United States ports. Among these untoward results the following specific instances (table 1) may be mentioned after inspections and subsequent fumigations in New York.

TABLE 1.—*Excessive numbers of rats recovered after fumigation, in New York, of several vessels from foreign ports, during January, February, and a portion of March 1945*

Date of arrival	From—	Number of rats	
		Estimated	Recovered
Jan. 15.....	Alexandria and Liverpool.....	125	134
Jan. 24.....	Alexandria.....	20	98
Feb. 8.....	Oran.....	50+	148
Feb. 17.....	Wales.....	35	76
Feb. 24.....	Casa Blanca.....	200+	384
Mar. 1.....	do.....	75	67
Mar. 3.....	Port Said.....	50	76
Mar. 4.....	Liverpool.....	35	188

The rats obtained in these and other fumigations were subjected to autopsy in the laboratory of the New York Quarantine Station. Experimental animals were also inoculated with portions of liver and spleen to determine whether plague infection was present. Fortunately these inoculations were without result.

Without more tangible evidence it would manifestly be unfair to allege that vigilance over rat infestation of vessels has been dangerously relaxed in certain foreign ports. However, it can be said that the situation whereby considerable numbers of rats are permitted to infest vessels destined for United States ports is potentially dangerous to the public health and is causing apprehension. Therefore, sanitation officers generally, and particularly in the United States, should increase their efforts to discover and destroy rodents on vessels.

In addition to the major incidence of rat infestation noted in table 1, the usual number of fumigations was performed on other vessels. Thus, in January 1945 there were 18 other fumigations which resulted in the extermination of between 5 and 30 rats on each vessel. In February there was a total of 22 fumigations, with a total "kill" of 855 rats, most of these being recovered on the 3 vessels fumigated during the month. Lesser numbers of rats were destroyed on the remaining 19 vessels.

INCREASE OF RAT INFESTATION ON OIL TANKERS¹

By ROBERT OLESEN, *Medical Director*² and J. L. STONE, *Administrative Assistant, United States Public Health Service*

Prior to the present war it was generally true that oil tankers were less liable to become rat infested than were other cargo vessels. The

¹ From the Foreign Quarantine Division.

² Chief Quarantine Officer, U. S. Quarantine Station, Rosebank, N. Y. (Deceased, Aug. 16, 1945.)

records of the New York quarantine station show, however, that during the war there has been a significant increase in rat infestation of tankers.

The cargo-carrying space of the conventional type of tankers consists of huge tanks instead of holds. There is, therefore, little opportunity for rat infestation. During the war, in order to increase the cargo-carrying capacity of tankers, additional freight space has been provided by the erection of elevated steel racks running the length of the main decks of such vessels, well above the pipe lines, valves, and tank tops. On these racks are carried planes, boats, engines, freight cars, and other heavy equipment for the war fronts. In order to obtain and load this extra cargo it is necessary to spend considerable time at docks not ordinarily touched during routine tanker operations. Moreover, such a vessel must call at foreign ports that are not ordinarily visited during oil-carrying operations, thereby rendering the vessel more liable to infestation by rodents at both ends of the voyage.

Another factor contributing to rat infestation of tankers is the practice of permitting garbage to accumulate on deck during a stay in port. Ordinarily such refuse is dumped overboard after the vessel leaves port. In some instances garbage is kept in receptacles on the deck of the vessel while in port, being removed and burned in incinerators on the adjoining dock. However, such facilities are not generally available, necessitating the accumulation of garbage on deck awaiting disposal at sea. It is obvious that accumulation of garbage on the deck of a vessel lying at a rat-infested dock will result in rat infestation of the vessel.

That infestation of oil tankers does occur is apparent when the rat inspection and fumigation records compiled in New York are examined. At this point it may be well to explain that fumigations in New York are based entirely upon preliminary inspections and estimations of rats made by skilled operators of the Public Health Service. Ordinarily vessels are inspected at least twice a year and more frequently when requests are received or infestation is suspected. The manner in which inspections are made and infestation determined has been described (1).

RESULTS OF FUMIGATIONS OF TANKERS

In table 1 are shown the results of fumigations of tanker and other cargo-carrying vessels during the fiscal years 1942, 1943, and 1944. An examination of this table discloses that only two oil tankers were found to be rat infested in 1942. In the following year, there was a slight but significant increase in the number of tankers requiring fumigation for rat destruction, the average number of rodents destroyed on each being 27. In the fiscal year 1944, coinciding with the more general use of cargo racks above the decks, and increased fre-

TABLE 1.—Results of fumigation for destruction of rats on oil tankers and other vessels in the port of New York during the fiscal years 1942, 1943, and 1944, with numbers of rats estimated prior to fumigation and numbers of rats recovered after fumigation with hydrocyanic acid gas

	Fiscal year								
	1942			1943			1944		
	Number of fumigations	Rats estimated	Rats recovered	Number of fumigations	Rats estimated	Rats recovered	Number of fumigations	Rats estimated	Rats recovered
Tankers from infected ports.	1	15	19	1	15	19	19	242	376
Tankers from clean ports....	1	14	2	3	38	89	6	75	51
All other vessels.....	116	2,700	3,768	148	3,391	4,880	184	2,725	3,802
Total.....	118	2,729	3,789	152	3,444	4,988	209	3,042	4,229

quency of infested docks here and abroad, there was a significant increase in the number of rat-infested tankers. The average number of rats per fumigation, however, decreased to 17.

It is also worthy of note that an increased number of vessels other than tankers also required fumigation for rat destruction. Thus, there were 116 fumigations of cargo-carrying vessels and a few fumigations of passenger vessels in 1942, 148 in 1943, and 184 in 1944. The average number of rats per fumigation was approximately 33 in 1942 and in 1943, but decreased to 21 in 1944.

At this time it was realized that tankers, like other cargo-carrying vessels, are susceptible of considerable infestation. It was also apparent that the older tankers, often constructed without benefit of modern ratproof design, were more frequently infested than the newer vessels of the same general type. Moreover, as might be expected, infestation occurred in living quarters, storerooms, and spaces considerably removed from tanks in which oil was carried.

INFESTATION ON TANKERS

Much of the infestation of oil tankers is due to construction methods in vogue prior to the so-called ratproof-construction era. With the older construction methods, food other than garbage is accessible to rats on tankers, notably in the provision storerooms, which are frequently entered by rats through open doors and openings around beams, pipes, and cables. Then too, rats often gnaw through the wooden sheathing of partitions enclosing storeroom spaces. Double walls, when present, provide harborage in the sheathing of quarters, pantries, and similar spaces.

When present on a tanker, the bridge deck space furnishes an attractive rat harborage. This space opens on the main deck, usually through four large doors, which too often are left open. In many instances the provision storeroom occupies a portion of this space. It

is also the practice to store ship's gear in the bridge deck space, thereby affording additional harborage for rats.

Although the spaces already mentioned are the more usual places in which rats may be expected to live on tankers, it has been rather surprising to find that other portions of these vessels may also be infested. Thus, while the majority of rodents killed by fumigation have been found where food was stored or available, many others were discovered in living quarters and such comparatively inaccessible and unattractive locations as lifeboats. The various locations where dead rats were found after fumigation are shown in table 2. That rats are

TABLE 2.—*Places in which rats were recovered after fumigations of oil tankers and the numbers in each at New York, during the fiscal years 1942, 1943, and 1944*

Locations	Fiscal year		
	1942	1943	1944
No. 1 hold.....	1		31
Bridge deck space.....	11	15	167
Forepeak and storeroom.....	3		14
Afterpeak and storeroom.....			44
Lifeboats.....			3
Galley and bakery.....		25	35
Saloon and pantry.....			11
Provision storeroom.....		58	86
Messrooms.....		4	6
Quarters (crew's).....	2		9
Quarters (officers').....	4	6	21
Total.....	21	108	427

becoming a sanitary and health problem on vessels heretofore regarded as relatively free of such infestation is a matter requiring close attention from those charged with ship sanitation and disease prevention.

RAT DESTRUCTION ON VESSELS

It is interesting to examine the data set forth in table 3, in which the number of rats destroyed by means other than fumigation is recorded. It will be noted that the greatest numbers of rats were killed by fumigation, although the destruction per vessel in 1944 was lower than in 1942. Additional rodents were destroyed by such relatively unorthodox methods as physical violence, i. e., clubbing and the

TABLE 3.—*Rats killed by trapping, fumigation, and other means on certain vessels in New York during the fiscal years 1942, 1943, and 1944*

Mode of destruction	Fiscal year		
	1942	1943	1944
Trapping.....	2, 183	1, 847	1, 546
Fumigation.....	3, 799	4, 988	4, 229
Other means.....	202	368	570
Total.....	6, 174	7, 203	6, 345

like, as in the case of litters of young discovered during routine inspections. In many instances rodents are destroyed during the course of preliminary inspections, some of which disclose insufficient infestation to warrant fumigation. According to the best authority available there is little to justify the belief that any considerable number of rats on vessels are destroyed by dogs or cats.

CORRECTIVE MEASURES

With relatively slight modifications the general measures employed in ship ratproofing may be adapted to tankers. Thus, all pipe and ventilating openings into provision storerooms should be surrounded by 16-gage wire mesh, the openings of which are not more than one-half inch square. The openings through which pipes and cables pierce wooden sheathing should be surrounded by 6-inch metal collars of 18-gage sheet metal. If a provision storeroom door is made of steel it should fit snugly so that no opening greater than one-half inch is left. When a wooden door is used there should be a facing of 18-gage sheet metal. All edges of wooden enclosures and all wooden sheathing and double doors in quarters, pantries, saloons, and messrooms should be flashed with strips of 18-gage metal at least 6 inches wide at all gnawing edges. Metal collars should be installed around all pipes and cables where such utilities enter rat-habitable spaces.

Excess ship's stores, always attractive to rats, should be stowed in an orderly manner and preferably elevated from decks. Particular attention should be devoted to the exclusion of rats from pantries, messrooms, and galleys through cleanliness and protection of food-stuffs. Provision for safeguarding garbage in closely covered metal cans prior to disposal is important especially on vessels on which garbage is kept on board awaiting disposal at sea.

Most of the corrective measures mentioned may be instituted by the crews of tankers without outside assistance, particularly when an energetic and resourceful ship's carpenter is available or resourceful shore personnel is maintained. In any event it is usually possible to "sell" the idea of ratproofing to the agents and owners of such vessels by pointing out the saving that can be effected by preventing the destruction of food and ship's stores.

In addition to the measures already mentioned, it is usually helpful to suggest the acquisition and use of at least 1 dozen approved rat traps, employing varied baits and setting the traps where the rodents are most likely to infest the vessel. In attempting to eradicate rats by trapping it should be remembered that this effort may fail when food is available outside of the traps. Many suggestions for successful trapping have been given in a special publication (2).

PREVENTION

That recently constructed tankers are practically immune to rat infestation has been amply demonstrated by the experience at this port during the present war. Not one recently constructed tanker vessel of this type has required fumigation. The ratproofing of new vessels is supervised by trained sanitary inspectors of the Public Health Service while such craft are under construction. This activity forms a separate chapter of repressive measures at the present time and deserves consideration because of the favorable influence exerted upon sanitary effort.

REFERENCES

- (1) Akin, C. V., and Sherrard, G. C.: Ship fumigation by observed rodent infestation. *Pub. Health Rep.*, 42: 861-867 (1927).
- (2) Trapping rats on ships. *Pub. Health Rep.*, 55: 1057-1061 (1940). (Reprint No. 2170.)

JOINT REPORT ON PROPOSALS FOR A NATIONAL RESEARCH FOUNDATION¹

The joint meeting of the Councils was convened September 28, 1945, to consider specifically the relation of the Public Health Service to the report made by Dr. Vannevar Bush to the President, and to pending legislation pertaining to the implementation of the report.

Each member of the Councils, at the request of Surgeon General Parran, expressed his opinion regarding the relationship of the Public Health Service with the National Research Foundation or any overall research body which the pending bills would create.

The consensus of the Councils may be summarized as follows:

I. The Bush report is a magnificent and distinguished document which outlines a plan for stimulating basic research in civilian research institutions and for continuing the close and profitable cooperation between civilian and governmental research agencies. To implement the recommendations of the report, the formation of a new body, the National Research Foundation, was proposed. The report expressed the belief that the existing governmental research agencies should be further developed and provided with more funds. It further emphasized that, although a new independent agency is needed to develop and foster research, this new agency should in no way conflict with existing governmental agencies, but should "supplement the research activities of these agencies in a valuable manner." The report proposes that a National Research Foundation would provide for the training of scientific personnel, promote basic research, and cooperate with governmental research agencies. These aims and views expressed in the report were endorsed by the Councils.

II. (a) The Councils agreed that pending legislation is not clear

¹ National Advisory Health Council and National Advisory Cancer Council of the Public Health Service.

regarding the relation of the proposed new body to the budgetary and research policies of existing governmental agencies. Although the various bills may be interpreted broadly as carrying out the intent of the Bush report, the omission of specific language may permit the interpretation that the National Research Foundation would exercise direct or indirect control over the budgetary and research policies of the existing agencies. The Bush report visualized only a consultative, advisory, and cooperative relationship.

(b) In the firm belief that the Public Health Service should retain autonomy in its research activities, the Councils were of the opinion that pending legislation should be clarified.

(c) Under existing law (P. L. 410, sec. 301, par. (c) and (d)), the Public Health Service has broad authority to coordinate and conduct research upon the physical and mental impairments and diseases of mankind, to allocate grants-in-aid for such research to other institutions, upon recommendation of its advisory councils, and to provide fellowships for the training of scientific personnel in these fields.

In this connection, the Councils recommended that the Public Health Service continue to develop and expand its research and training programs, as authorized by Congress, both in its own facilities and through grants-in-aid to universities and other institutions.

III. A study of the pending legislation shows lack of agreement in regard to the representation of governmental agencies on the board or executive organization of the proposed National Research Foundation. In the medical portion of the Bush report (pt. II, p. 57) it is stated that "men who are experienced in research and who understand the problems of the investigator should administer the agency and its policies." The Councils agree with the intent and implications of this statement, but they believe that governmental agencies should be represented on such boards and advisory committees as may be set up in or by the new body.

This opinion is based on the reasonable assumption that governmental agencies would appoint as their representatives men "who are experienced in research;" but it appears advisable that this requirement should be clearly expressed in the proposed legislation.

IV. In general, it was the opinion of the Councils that appropriate legislation can maintain in peacetime the cooperative relationship which was maintained throughout the war among governmental agencies, the Office of Scientific Research and Development, and civilian research institutions. In the establishment of a National Research Foundation, the Councils favored the appointment of a board to carry out the powers and purposes of the Foundation, and the choice by that board of its own chairman and other officers. The Councils felt, however, that members of the board should be selected from among persons nominated to the President by the National Academy of Sciences and governmental research agencies.

It was the opinion of the Councils that either (a) a new bill should be written as a cooperative enterprise of all governmental agencies concerned and the appropriate committee of the National Academy of Sciences; or (b) that the defects of proposed legislation be remedied by amendments such as those recommended by the Senate Committee on Naval Affairs in its reports on S. 825 (Rept. No. 551, Calendar No. 549), July 28, 1945, as follows:

1. The Board shall in no way relieve governmental agencies of their responsibility for, or authority over, research and development work under their legal cognizance. This Act shall not be construed as superseding, curtailing, or limiting any of the functions or activities of existing governmental agencies now authorized to engage in scientific research and development, or as authorizing the Board to exercise any supervisory direction or power of regulation over such functions or activities in any manner. Funds allocated by the Board to other governmental agencies shall be utilized for projects designated by the Board and undertaken on its behalf, and shall be in addition to, and not in lieu of, funds regularly appropriated to the agency concerned.

2. Wherever practicable the Board shall make use of the facilities and services of governmental agencies legally available for scientific research or development work, and wherever practicable it shall conduct research or development projects related to the legally authorized functions or activities of any governmental agency through or in cooperation with such agency. The said agencies are hereby authorized to make such facilities and services available to the Board and to participate in the conduct of its projects, on terms mutually agreeable to the Board and to the agency concerned. The Board shall not operate laboratories under its own auspices.

V. To implement the foregoing opinions, the following motions were passed unanimously by the Councils:

1. That proposed legislation should be amended to include statements to the effect that autonomy in the development and conduct of their research programs should be maintained by those governmental agencies now engaged in such activities.

2. That there should be governmental representation on such boards and advisory committees as may be set up in connection with the proposed National Research Foundation.

3. That the joint report and recommendations of the Councils be brought to the attention of other scientific groups, both public and private, now considering the proposals for a National Research Foundation.

A MODIFIED RABBIT BOX TRAP FOR USE IN CATCHING LIVE WILD RATS FOR LABORATORY AND FIELD STUDIES¹

By CURT P. RICHTER and JOHN T. EMLER, JR.

Several years ago, while testing a variety of chemical compounds for their possible use as rat poisons, we were confronted with the

¹ From the Psychobiological Laboratory, Phipps Psychiatric Clinic, Johns Hopkins Hospital. The work described in this paper was done under a contract, recommended by the Committee on Medical Research, between the Office of Scientific Research and Development and the Johns Hopkins University, and was aided by the Rodent Control Division of the Bureau of Street Cleaning, Baltimore, Md.

problem of working out a simple and efficient method of obtaining a constant supply of live wild rats for laboratory tests.

Various traps were tested, which were either available on the market or were obtained through the courtesy of the Fish and Wildlife Service, United States Department of the Interior.² Extensive tests were made with several wire and sheet-metal box traps. The time required for the rats to become adjusted to these traps and the low catch usually obtained made it impractical to use them for catching large numbers of live wild rats. Also, a considerable amount of mechanical repair was required. While working in the field with these traps we came in contact with people who were using traps of their own construction to rid their houses or stores of rats. Excellent results were reported when some form of a wooden box trap of a type used for catching rabbits was employed. It was decided, therefore, to use a similar box trap and to test it out in large numbers on a wide scale. The one that we used proved to be very effective and, for the time being, has solved our problem of catching wild rats for laboratory studies.

Figure 1 shows a drawing of this trap, which consists of four parts: a box, a trap door, a trigger stick, and a trigger wire. The box is made of undressed lumber, either yellow pine or poplar, and the top is covered with a heavy $\frac{1}{2}$ -inch wire-mesh hardware cloth. A block of wood 2" x 2" x 4 $\frac{1}{2}$ ", firmly fastened to the wire cloth with two large screws and broad washers, serves both as a handle for carrying the trap and as a fulcrum for the trigger stick. The door slides freely between strips of wood nailed to the inside of the box. The door hangs from the trigger stick by a loop of string. The trigger stick, $\frac{1}{2}$ " x $\frac{1}{2}$ " x 10", is sharpened almost to a point at one end and to a chisel edge at the other. The wire trigger made of a stiff 16-gage wire has two $\frac{1}{4}$ -inch notches, one near the top and one near the middle, and has a hook at the lower end to hold the bait. The top notch engages with the chisel end of the trigger stick; the middle notch hooks under one of the cross wires in the wire-mesh top of the trap. When properly set a gentle pull on the trigger wire disengages the trigger stick and allows the door to drop. To insure a sensitive, quick response of the trap it is important that the door should hang freely between the guides and not be pulled either forward or backward by the loop over the trigger stick.

The traps are simple to construct, inexpensive,³ and require very little upkeep. After exposure to rain the trap door may become warped and have to be planed to the proper size again, or the wooden guides for the door may have to be replaced after the rats have gnawed on them, or, after heavy use, the fulcrum post may have to be reset or replaced.

² Mr. J. Spencer, of Fish and Wildlife Service, loaned us 25 Japanese wire cage traps.

³ The traps were constructed by schoolboys at a cost of approximately \$1.00 each. We want to thank Mr. Stanley J. Pawelek, Supervisor of Industrial Education, for arranging to have the boys make the traps for us.

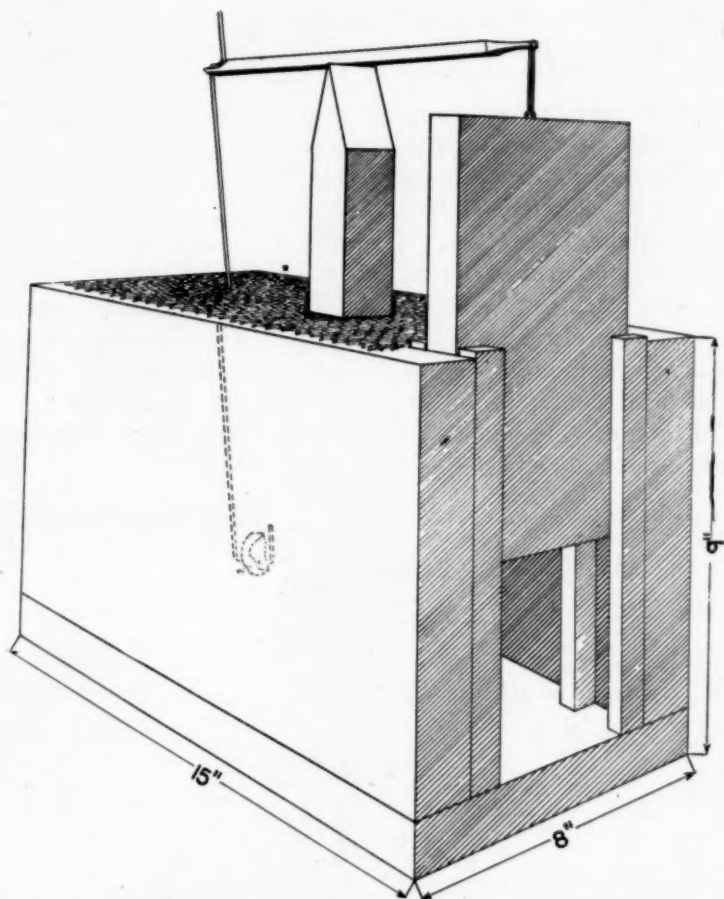


FIGURE 1.—Drawing of modified rabbit trap set ready to be sprung. A slight pull of the baited hook will release the trap door.

To set the traps in the field a small piece of bread or apple is placed on the hook of the trigger and a horse-feed mixture (oats, corn, and alfalfa, impregnated with molasses) is spread evenly over the floor.⁴

The effectiveness of the traps can best be demonstrated by the records obtained from an exhaustive trapping campaign carried out in 89 city blocks. The following procedure was used in trapping rats in a square block:

On the day before the traps were distributed all available rat food (garbage, etc.) was removed by the Bureau of Street Cleaning from the alleys and yards, and the inhabitants of the block were asked not to leave any food accessible to rats during the trapping period. Then, depending on the results of a survey of rat holes, runs, droppings, etc., from 100 to 300 traps were placed in the alleys, yards, garages, and cellars. Each day thereafter for several weeks the traps were checked, trapped rats were removed, and the hooks were rebaited as needed. All burrows

⁴ Mr. Henry Cordler, of the Rodent Control Division recommended the use of this molasses mixture, which has proved to be an essential feature of the trapping method.

were closed. Periodic surveys of fresh rat signs showed the progress of extermination, and trapping was not terminated until all burrows remained closed and no other signs of rats remained.

Figure 2 shows a typical trapping record taken from a fairly heavily infested block. Two hundred and sixty-five traps were used in this block. The records show the accumulated total catch and the total number of rats caught each day. The highest catch was obtained on the first night, 70 rats, and thereafter the catch fell off at a rapid but fairly constant rate. Trapping was continued for 13 days. At this time the catch totaled 225 rats. Thus, 70 rats, or 31 percent of the total number of rats caught in the block, were trapped during the first night; 45 rats, or 20 percent, the second night; 28 rats, or 12 percent, the third night; 33, or 15 percent, on the fourth night. In 4 days 176 rats, or 78 percent of the total, were caught. This gives a good measure of the efficiency of the traps.

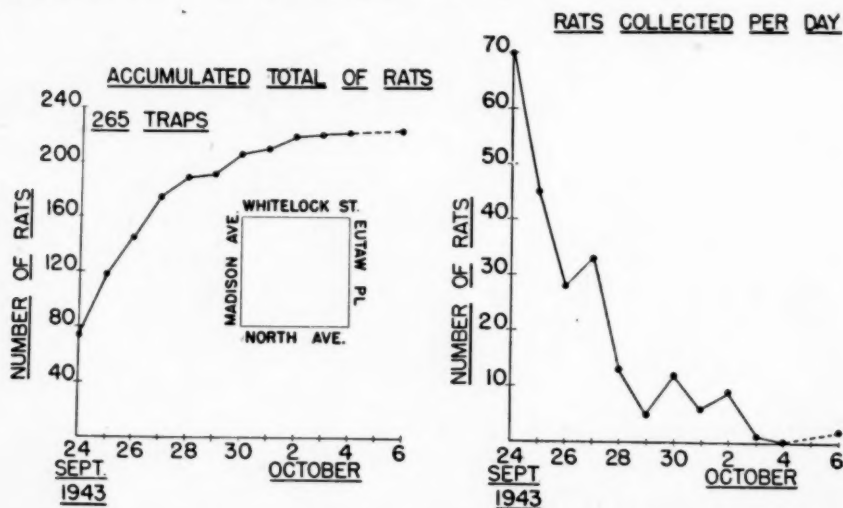


FIGURE 2.—Trapping records for a sample square block in Baltimore.

From this record it will be seen that rats entered the traps freely the first night and did not avoid them for several days or even weeks as they did the metal or wire traps. Actually, on many occasions rats were caught in the traps during full daylight, while the men were still in the same yard setting other traps. It is likely that the undressed lumber and the absence of any shiny parts on the trap account in part for the high efficiency of this trap.

Further evidence for the effectiveness of the traps is that two or three rats are commonly caught together and as many as nine rats have been taken at the same time in a single trap. Frequently, a mother and young have been caught together. Apparently the rats go into the traps primarily to eat the grain mixture on the floor and

then only accidentally discover the bait on the hook. Rats have been observed crowding into a trap, apparently for warmth and shelter.

Each day as the traps are serviced the live rats are transferred either to a large collection box or to small metal traps for carrying to the laboratory. Figure 3 shows a drawing of the collection box. It is made of wood 16" x 20" x 12", with a hinged door on top made of wire cloth. A door 5" x 5" is cut into the box at the one end and near the bottom. A wire cage 5½" x 5½" x 5½" is built over this hole on the

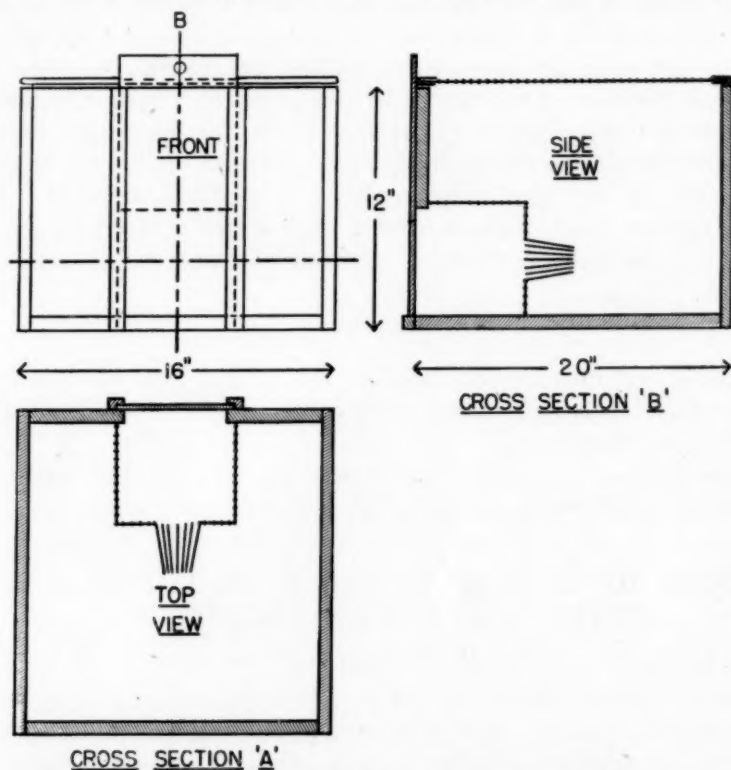


FIGURE 3.—Drawing of collection box used to collect rats from rabbit traps.

inside and a one-way trap cone connects this cage with the main part of the box. Thus, to transfer a rat to this box the door of the rabbit trap is placed opposite the opening. When the door is opened the rat runs out into the wire cage inside the collection box and from there on through the one-way opening to the inner compartment. As many as 25 rats can be confined in the collection box at one time. This collection box can also be used as a gassing chamber simply by covering it with a wet cloth and pumping cyanide gas through a small hole cut in one side.

A metal trap ⁶ is used to transfer single live rats. It is 12" x

⁶ Known as the spring floor mouse and rat trap. Manufactured by the Bromwell Wire Goods Co., Michigan City, Ind.

6½" x 4½" and is equipped with a trap door which is released by the weight of the rat on the floor. To make the transfer this metal trap is placed in the open position opposite the door of the rabbit trap. When the latter is opened the rat runs into the metal trap and is caught. Their square shape and the ease with which they can be stacked together make these traps very useful in transporting large numbers of rats. These traps can also be used in the laboratory to transfer wild rats from one cage to another.

About 2,000 of the wooden box traps have been constructed and used in various parts of Baltimore. After having been in service from 6 months to 2 years nearly all are in good working condition. Because of the high efficiency of this trap it has been possible not only to obtain thousands of live specimens in good condition for laboratory experimentation but also to obtain fairly complete data on the rat populations of the 89 city blocks for census and analysis purposes. The traps have been used also in control work to catch rats which survive poisoning operations, and in special locations where poisoning is not advisable.

SUMMARY

A simple and inexpensive modified rabbit box trap has been described which has a high efficiency for catching wild rats. It requires little servicing or upkeep.

A collection box and a small metal box trap were described for use in transferring rats from the rabbit traps to cages in the laboratory.

A REPORT OF DAMAGE TO FABRIC BY LIQUID HYDROCYANIC ACID GAS IN FUMIGATION¹

By G. C. SHERRARD, *Senior Surgeon (R), United States Public Health Service*

Recently, during fumigation of Coast Guard barracks at Baltimore, Md., a discoid of liquid hydrocyanic acid gas was thrown inadvertently on top of a Coast Guard hat band made of rayon material, which was lying on a mattress. When the liquid hydrocyanic acid gas in the discoid came in contact with the band, a gummy mass was formed. The individual rayon fibers appeared to have been softened and to have merged with each other, losing their identity. This effect probably was caused by the solvent action of the gas on the fibers. As seen in the accompanying photograph, the part of the fabric which did not come in direct contact with the discoid remained uninjured.

In order to determine whether or not an exceedingly high atmospheric concentration of hydrocyanic acid gas would cause damage to the uninjured portion, the band was exposed to an atmospheric concentration of 66.6 ounces of the gas per 1,000 cubic feet of space for a period of 4 hours. The test was performed in an airtight steel fumi-

¹ From the Foreign Quarantine Division.

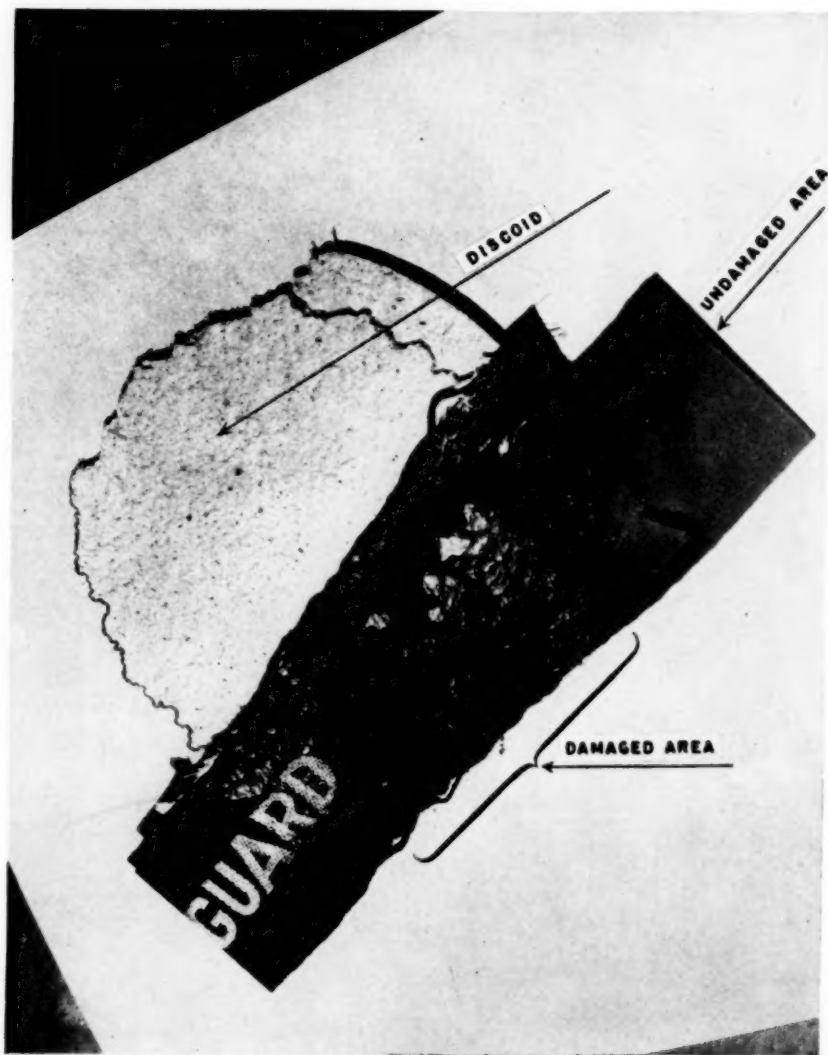
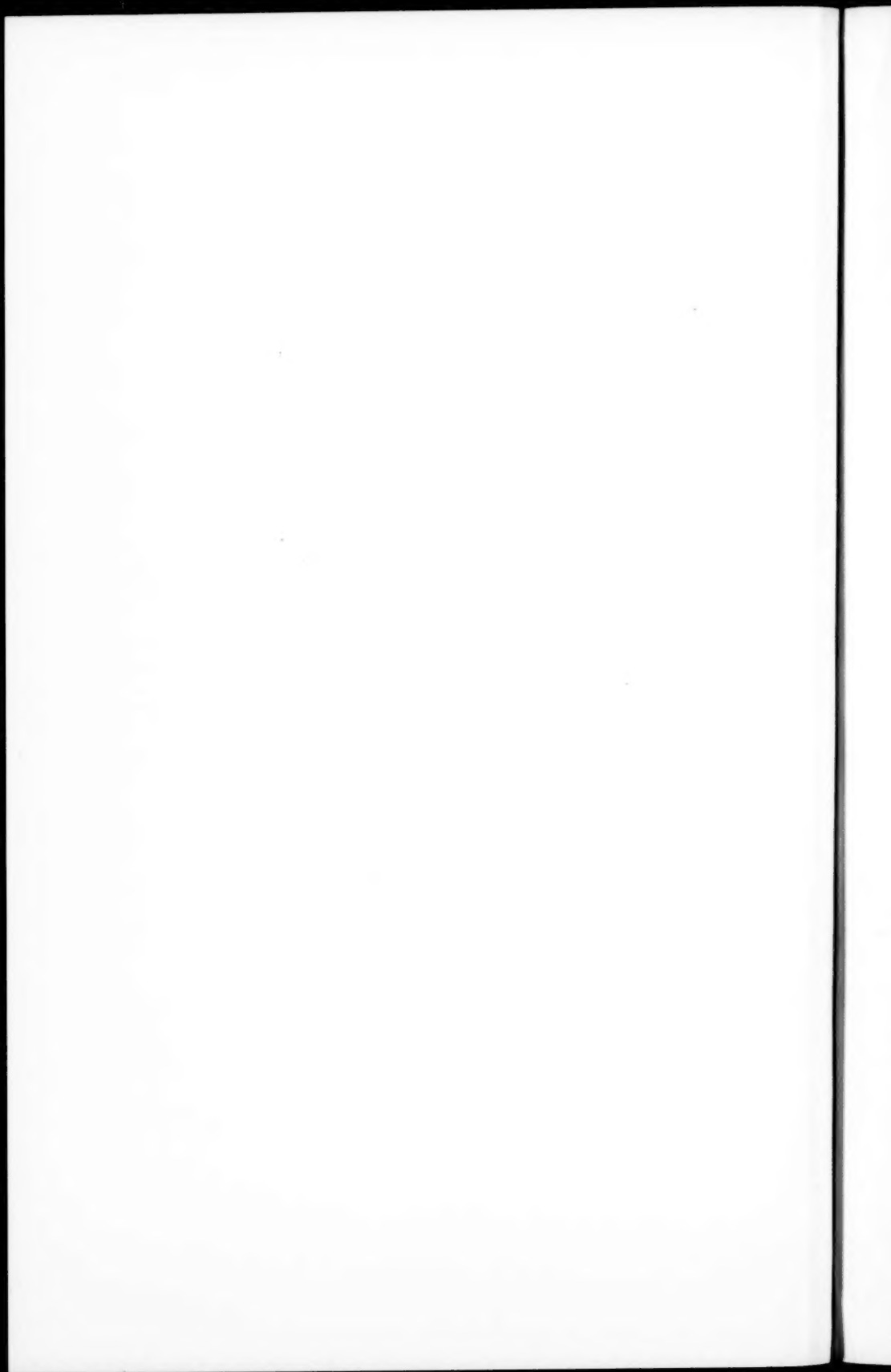


FIGURE 1.—Photograph showing hydrocyanic acid gas discoid adhered to rayon hat band. Edge of discoid has been crumpled in handling.



gating chamber, at a temperature of 50° F., and a +90-percent relative humidity. The uninjured portion of the band then was inspected carefully for evidence of injury. No such injury could be demonstrated. In color, texture, strength, and pliability of the fabric, the exposed specimen could not be distinguished from a new band.

Tests performed by the author several years ago at the New York Quarantine Station showed that hydrocyanic acid gas discoids damaged linoleum through two layers of heavy brown paper, but that four layers gave protection.

Experienced fumigators are aware that floor coverings and highly finished floors are subject to what they term "burns," when placed in contact with absorbent discoids containing liquid hydrocyanic acid gas. For this reason, they protect such coverings and floors by several layers of paper or other protective materials placed at points suitable for the distribution of the discoids.

In ship fumigation, experience has shown that hydrocyanic acid in gaseous form will not injure fabrics when the atmospheric concentration is not greater than 6 ounces per 1,000 cubic feet of space. However, the direct contact of discoids containing this gas in liquid form is capable of causing damage. It is probable that this damage is caused by the solvent action of the liquid on the fiber or dye. Fabrics composed of fibers of animal or vegetable origin appear to be less susceptible to damage than those of synthetic origin. Fabrics with a nap or pile, such as blankets and carpets, are not so likely to be damaged by direct contact with hydrocyanic acid gas discoids, because the nap or pile permits enough circulation of air beneath the discoids to allow evaporation of the liquid hydrocyanic acid gas before it comes in contact with the body of the fabric. In higher concentrations, fragile fabrics, such as window curtains, have been observed to undergo a slight change of color, white fabrics assuming a slight orange tinge. Linen fabrics appear more susceptible to color change than fabrics composed of cotton or animal fibers.

The practice of distributing discoids directly on carpets, even though they are composed of animal fiber and have a deep pile, may result in spotting or discoloration of the area immediately beneath the discoid. Damage of this type has been observed in ship fumigation. Careful inspection indicated that the damage was caused either by a solvent action of the liquid acid on the fabric dye or by a chemical reaction between the dye and the acid, with no apparent damage to the fiber.

Since hydrocyanic acid gas is slightly lighter than air and has a tendency to rise during the process of diffusion, it is good fumigating practice to distribute the discoids over the floor of the compartment to be fumigated. Therefore, it is a simple matter to protect finished floors or coverings by suitable layers of paper or canvas.

PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

September 9-October 6, 1945

The accompanying table (table 1) summarizes the prevalence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State for each week are published in the PUBLIC HEALTH REPORTS under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4 weeks ended October 6, 1945, the number reported for the corresponding period in 1944, and the median number for the years 1940-44.

TABLE 1.—Number of reported cases of 9 communicable diseases in the United States during the 4-week period September 9-October 6, 1945, the number for the corresponding period in 1944, and the median number of cases reported for the corresponding period, 1940-44

Division	Cur- rent period	1944	5-year median	Cur- rent period	1944	5-year median	Cur- rent period	1944	Cur- rent median
	Diphtheria			Influenza ¹			Measles ²		
United States.....	1,959	1,387	1,440	3,906	3,227	3,358	2,450	1,657	2,816
New England.....	30	17	25	50	16	9	229	170	304
Middle Atlantic.....	77	74	74	19	12	26	325	213	622
East North Central.....	170	119	138	112	79	204	455	284	519
West North Central.....	99	100	110	18	22	34	69	67	177
South Atlantic.....	643	310	485	1,085	968	968	80	124	151
East South Central.....	419	278	264	100	71	119	55	27	54
West South Central.....	328	287	287	2,310	1,828	1,642	146	127	124
Mountain.....	67	72	67	169	179	298	336	80	213
Pacific.....	126	130	91	43	52	101	755	565	359
	Meningococcus meningitis			Poliomyelitis			Scarlet fever		
United States.....	359	519	192	3,242	4,452	2,859	5,035	4,810	4,810
New England.....	11	35	20	262	199	151	306	386	386
Middle Atlantic.....	78	112	52	905	2,030	304	772	663	796
East North Central.....	72	120	19	699	906	811	1,087	1,169	1,208
West North Central.....	41	43	10	343	313	313	447	478	519
South Atlantic.....	46	50	41	258	528	314	919	770	770
East South Central.....	28	28	11	112	195	78	370	385	426
West South Central.....	36	31	9	216	55	55	389	195	181
Mountain.....	3	17	5	172	59	59	179	201	172
Pacific.....	44	83	29	275	167	125	566	563	375
	Smallpox			Typhoid and para- typhoid fever			Whooping cough ²		
United States.....	11	10	19	646	605	813	8,184	6,808	10,726
New England.....	0	0	0	23	34	34	933	620	886
Middle Atlantic.....	0	0	0	71	80	110	2,525	1,277	2,732
East North Central.....	1	7	7	75	62	109	1,720	1,632	3,009
West North Central.....	3	0	3	26	51	51	262	409	544
South Atlantic.....	1	2	1	113	118	150	969	1,108	1,160
East South Central.....	2	1	2	161	87	107	303	295	413
West South Central.....	3	0	3	109	110	152	563	655	535
Mountain.....	0	0	1	41	28	51	299	358	478
Pacific.....	1	0	1	27	35	35	610	454	917

¹ Mississippi and New York excluded; New York City included.

² Mississippi excluded.

DISEASES ABOVE MEDIAN PREVALENCE

Poliomyelitis.—The number of cases of poliomyelitis dropped from 3,436 during the preceding 4 weeks to 3,242 during the 4 weeks ended October 6. The number was about 70 percent of the 1944 incidence for this period, but it was 10 percent above the 1940-44 median. The number of cases was higher than in 1944 in the New England, West North Central, West South Central, Mountain, and Pacific sections and lower in the Middle Atlantic, East North Central, South Atlantic, and East South Central sections. Compared with preceding years the current incidence was higher than the median expectancy in all sections except the East North Central and South Atlantic sections. Sixty-five percent of the total cases were reported from 10 States, viz, New York (446 cases), Illinois (290), Pennsylvania (236), New Jersey (223), California (195), Wisconsin (187), Massachusetts (179), Texas (139), Ohio (131), and Iowa (107).

Table 2 shows the total reported cases since the beginning of the year and the incidence by weeks since the first of August, with corresponding data for 1944 and 1943. Early reports indicated that the peak of the current epidemic might have been reached during the week ended August 25, and in some sections the largest number of cases was reported during that week. However, later reports show that the highest weekly incidence for the country as a whole was reached during the week ended September 15, when 965 cases were reported. While there has been considerable fluctuation in the number of weekly cases in the various sections of the country the incidence had definitely declined in all sections.

Diphtheria.—For the current 4-week period there were 1,959 cases of diphtheria reported as compared with 1,387 for the corresponding period in 1944 and a 5-year (1940-44) median of 1,440 cases. For the country as a whole the incidence was the highest for this period since 1939 when approximately 2,300 cases were reported. The incidence was considerably above the normal seasonal expectancy in the East North Central, South Atlantic, East and West South Central, and Pacific sections, but in the other 4 sections the numbers of cases were either about the same as the median or fell below it. The disease is most prevalent in the South Atlantic and South Central sections, the largest excess over the median being reported from the East South Central section.

Influenza.—The number of cases of influenza reported for the current 4-week period was about 20 percent above the median expectancy. The increase, however, was confined to only three sections of the country, viz, the West South Central, South Atlantic, and New England sections—of the total cases 2,133 occurred in the State of Texas. In all other sections the incidence was relatively low.

TABLE 2.—Number of cases of poliomyelitis reported in each geographic area during 1945, 1944, and 1943¹

Division	Total Jan. 1- Oct. 13	Week ended—									
		August				September					October
		4	11	18	25	1	8	15	22	29	6 13
All regions:											
1945.....	10,808	476	671	692	931	917	896	965	864	774	639 549
1944.....	16,179	932	1,015	1,260	1,529	1,680	1,498	1,440	1,159	976	877 710
1943.....	10,319	450	545	747	872	956	906	1,020	818	679	515 495
New England:											
1945.....	734	33	53	38	62	63	59	69	78	59	56 44
1944.....	634	36	37	54	74	75	64	49	71	38	41 38
1943.....	734	32	36	62	62	77	73	91	85	84	28 52
Middle Atlantic:											
1945.....	3,123	196	227	232	344	295	236	330	213	207	155 127
1944.....	7,037	413	449	601	756	895	761	674	505	470	381 320
1943.....	769	20	38	46	57	72	73	91	83	67	63 50
East North Central:											
1945.....	1,888	51	113	121	189	177	222	160	201	190	148 136
1944.....	2,762	143	178	215	271	321	255	329	236	174	167 142
1943.....	2,048	46	79	144	241	249	273	288	207	171	145 101
West North Central:											
1945.....	807	15	29	33	49	97	88	122	69	82	70 69
1944.....	928	28	54	67	104	77	112	76	85	73	79 64
1943.....	1,372	61	117	118	131	183	138	148	114	88	80 67
South Atlantic:											
1945.....	1,098	46	78	76	86	80	70	60	82	59	57 31
1944.....	2,541	167	167	195	214	205	187	169	149	114	96 88
1943.....	203	5	8	7	10	8	10	23	14	18	9 9
East South Central:											
1945.....	610	28	35	47	37	30	39	23	33	27	29 28
1944.....	1,013	84	67	53	56	48	57	59	53	43	40 20
1943.....	209	11	5	29	20	14	12	7	6	10	4 6
West South Central:											
1945.....	1,221	58	78	79	86	60	52	75	66	46	29 37
1944.....	423	27	23	16	11	14	17	15	13	14	13 7
1943.....	1,782	122	119	104	117	81	90	89	67	49	23 38
Mountain:											
1945.....	481	18	29	17	35	55	59	54	46	34	38 29
1944.....	181	4	9	12	16	12	15	18	21	12	8 5
1943.....	774	29	23	43	47	123	93	92	85	46	51 36
Pacific:											
1945.....	846	31	29	49	43	60	70	72	76	70	57 48
1944.....	660	30	31	47	27	33	30	51	26	38	522 26
1943.....	2,428	124	120	194	187	149	144	191	157	146	112 136

¹ Similar tables with earlier data appeared in PUBLIC HEALTH REPORTS of Sept. 7, 1945, page 1055, and Oct. 5, 1945, p. 1183.

Meningococcus meningitis.—The number of cases of meningococcus meningitis rose from 299 for the preceding 4 weeks to 359 for the 4 weeks ended October 6. The number was about 70 percent of the 1944 figure (519 cases) for this period, but it was almost twice the 1940-44 median. The West South Central section alone reported an increase over the 1944 incidence, but all sections except the New England and Mountain reported increases over the 1940-44 medians. Reports indicate that the increase that normally occurs in the early fall may have appeared somewhat earlier than usual this year, since in many preceding years the lowest incidence of the year was reported during the period corresponding to the one under consideration.

Scarlet fever.—The number of cases of scarlet fever rose from 3,356 during the preceding 4 weeks to 5,035 during the 4 weeks ended October 6. An increase of this disease is normally expected at this

season of the year. While the number of cases was slightly above the 1940-44 median, the rate of increase during the current period was considerably below that of the corresponding period in preceding years. In the South Atlantic, West South Central, and Pacific sections the incidence was higher than the seasonal expectancy, in the Mountain section the number of cases was about normal, and in all other sections the incidence was relatively low.

DISEASES BELOW MEDIAN PREVALENCE

Measles.—For the 4 weeks ended October 6 there were 2,450 cases of measles reported as compared with 1,657 for the corresponding period in 1944 and a 5-year (1940-44) median of 2,816 cases. The incidence was above the normal expectancy in the West South Central, Mountain, and Pacific sections and about normal in the East South Central section, but all other sections reported a relatively low incidence.

Smallpox.—The incidence of smallpox for the current 4 weeks was about on a level with the incidence for the corresponding period in 1944, but the number of cases (11) was about 60 percent of the 1940-44 median (19 cases). In regions where cases occurred the number was either the same or less than the median.

Typhoid and paratyphoid fever.—The number of cases (646) of this disease was slightly higher than the number reported for the corresponding 4 weeks in 1944, but it was only about 80 percent of the seasonal expectancy (813 cases). The East North Central, East South Central, and Mountain sections reported more cases than occurred during the corresponding period in 1944, but the East South Central section alone reported an excess over the preceding 5-year median.

Whooping cough.—The number of cases (8,184) of whooping cough was 1.2 times the number reported for the same 4 weeks in 1944, but it was only about 75 percent of the 1940-44 median (approximately 11,000 cases). The New England, Middle Atlantic, East North Central, East South Central, and Pacific sections reported a higher incidence than occurred in 1944, but only 2 sections, the New England and West South Central, reported an excess over the 1940-44 median.

MORTALITY, ALL CAUSES

For the 4 weeks ended October 6 there were 33,136 deaths from all causes reported by 93 large cities to the Bureau of the Census. The average number reported for the corresponding period in 1942-44 was 31,372 deaths. For each of the first 3 weeks of the period the number of deaths was higher than the preceding 3-year average, but during the last week the number was 2.3 percent less than the average.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED OCTOBER 13, 1945

Summary

For the fourth consecutive week the incidence of poliomyelitis declined. A total of 549 cases was reported, as compared with 639 last week, 711 for the corresponding week last year, and a 5-year (1940-44) median of 484. An increase was recorded only in the West South Central area (from 29 to 37 cases). Six of the 15 States reporting 10 or more cases (Michigan, Wisconsin, Iowa, Tennessee, Oklahoma, and Washington) reported an aggregate of 144 cases, an increase for the week of 42, while in 8 of these 15 States (Massachusetts, New York, New Jersey, Pennsylvania, Ohio, Illinois, Minnesota, and California) a decline of 77 cases occurred—from 346 to 269. Texas reported the same number (20) for both weeks. The total to date is 10,845, as compared with 16,134 and 10,319, respectively, for the corresponding periods of 1944 and 1943, and a 5-year median of 7,435.

Of the total of 75 cases of meningococcus meningitis reported, as compared with 89 last week and a 5-year median of 49, New York reported 8, California 6, and Ohio and Pennsylvania 5 each. The cumulative total is 6,843, as compared with 14,154 and 14,954, respectively, for the corresponding periods of the epidemic years 1944 and 1943, and a 5-year median of 2,782.

Of the current total of 592 cases of diphtheria reported, more than for the corresponding week of any of the last 5 years except 1942 (613), 362 cases, or 61 percent, occurred in the South Atlantic and East South Central areas, as compared with 177 cases, or 41 percent, of the total for the corresponding week last year. The total to date is 11,855, as compared with 9,268 for the corresponding period last year and a 5-year median of 10,537.

A total of 8,380 deaths was recorded for the week in 93 large cities of the United States, as compared with 8,316 last week, 8,390 for the corresponding week last year, and a 3-year (1942-44) average of 8,509. The cumulative total is 366,622, as compared with 368,199 for the corresponding period last year.

Telegraphic morbidity reports from State health officers for the week ended October 13, 1945, and comparison with corresponding week of 1944 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44
	Oct. 13, 1945	Oct. 14, 1944		Oct. 13, 1945	Oct. 14, 1944		Oct. 13, 1945	Oct. 14, 1944		Oct. 13, 1945	Oct. 14, 1944	
NEW ENGLAND												
Maine.....	1	0	0	1	-----	-----	4	1	24	0	2	1
New Hampshire.....	0	0	0	-----	-----	-----	0	0	1	0	0	0
Vermont.....	3	0	0	-----	7	-----	0	1	5	0	0	0
Massachusetts.....	0	4	3	-----	-----	-----	67	40	74	2	5	3
Rhode Island.....	0	0	0	20	9	-----	2	0	4	0	3	2
Connecticut.....	0	1	1	-----	7	6	5	6	6	1	2	1
MIDDLE ATLANTIC												
New York.....	5	11	12	-----	12	15	16	25	76	8	19	5
New Jersey.....	4	1	2	4	1	5	14	13	24	4	9	3
Pennsylvania.....	6	8	12	1	2	1	100	29	67	5	12	8
EAST NORTH CENTRAL												
Ohio.....	10	9	12	-----	2	6	11	8	19	5	9	2
Indiana.....	13	5	8	2	3	5	3	5	9	3	1	1
Illinois.....	7	8	14	1	-----	7	50	19	19	4	10	7
Michigan ¹	12	14	12	1	-----	1	60	7	57	2	12	2
Wisconsin.....	2	0	3	21	9	19	15	43	53	2	2	1
WEST NORTH CENTRAL												
Minnesota.....	5	19	5	-----	2	2	6	2	4	1	5	0
Iowa.....	3	1	2	3	-----	-----	2	2	8	0	4	0
Missouri.....	5	4	6	2	-----	1	3	1	5	3	7	0
North Dakota.....	0	3	2	3	-----	4	0	0	4	0	2	0
South Dakota.....	2	4	4	-----	-----	-----	2	1	2	0	0	0
Nebraska.....	7	13	2	-----	4	2	4	2	8	1	0	0
Kansas.....	5	2	2	2	-----	2	13	13	6	0	1	1
SOUTH ATLANTIC												
Delaware.....	1	0	0	-----	-----	-----	1	0	1	0	0	0
Maryland ¹	26	6	6	-----	4	3	1	2	5	2	2	2
District of Columbia.....	0	0	0	-----	-----	-----	0	0	1	0	1	1
Virginia.....	30	10	30	119	123	123	20	2	22	2	4	2
West Virginia.....	30	7	7	-----	2	2	0	0	5	0	4	1
North Carolina.....	84	30	59	-----	5	1	3	7	7	2	2	1
South Carolina.....	30	13	25	302	218	200	49	2	4	0	1	1
Georgia.....	33	22	28	18	12	13	3	5	5	1	2	1
Florida.....	7	6	6	8	1	1	0	4	1	0	2	1
EAST SOUTH CENTRAL												
Kentucky.....	28	6	13	-----	-----	-----	23	2	7	1	0	2
Tennessee.....	26	13	13	38	4	8	1	0	11	3	3	1
Alabama.....	23	37	32	18	17	17	1	2	3	2	1	1
Mississippi ¹	44	27	17	-----	-----	-----	0	-----	-----	1	1	0
WEST SOUTH CENTRAL												
Arkansas.....	12	10	16	28	32	16	4	1	5	2	0	0
Louisiana.....	8	25	14	4	1	3	1	1	1	1	1	1
Oklahoma.....	5	12	12	9	22	25	1	0	3	2	1	0
Texas.....	60	46	43	712	647	507	25	44	25	2	4	2
MOUNTAIN												
Montana.....	1	0	2	-----	2	3	15	2	11	1	1	0
Idaho.....	0	0	0	7	3	3	57	1	1	0	0	0
Wyoming.....	2	1	1	1	2	2	1	1	1	0	0	0
Colorado.....	9	3	3	33	10	21	5	12	12	0	1	0
New Mexico.....	4	11	0	3	-----	-----	2	0	0	0	0	0
Arizona.....	1	2	1	20	20	47	1	0	13	0	0	0
Utah ¹	0	0	0	-----	-----	1	8	5	5	0	0	0
Nevada.....	0	0	0	-----	-----	-----	1	1	0	0	0	0
PACIFIC												
Washington.....	12	8	1	-----	-----	-----	80	8	9	4	4	1
Oregon.....	9	2	2	-----	7	7	0	21	11	2	3	1
California.....	17	26	24	7	11	28	157	180	57	6	13	2
Total.....	592	430	433	1,388	1,191	1,191	837	521	980	75	156	49
41 weeks.....	11,855	9,268	10,537	78,593	344,741	173,317	106,311	594,891	546,291	6,843	14,154	2,782

¹ New York City only.

² Period ended earlier than Saturday.

Telegraphic morbidity reports from State health officers for the week ended October 13, 1945, and comparison with corresponding week of 1944 and 5-year median—Con.

Division and State	Polio-myelitis			Scarlet fever			Smallpox			Typhoid and para-typhoid fever ¹		
	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44
	Oct. 13, 1945	Oct. 14, 1944		Oct. 13, 1945	Oct. 14, 1944		Oct. 13, 1945	Oct. 14, 1944		Oct. 13, 1945	Oct. 14, 1944	
NEW ENGLAND												
Maine.....	5	0	0	19	14	10	0	0	0	2	1	2
New Hampshire.....	1	2	1	7	1	2	0	0	0	0	0	0
Vermont.....	1	2	1	2	4	6	0	0	0	1	0	0
Massachusetts.....	28	27	13	66	87	92	0	0	0	3	3	3
Rhode Island.....	0	1	1	4	7	4	0	0	0	0	0	0
Connecticut.....	9	7	5	5	24	18	0	0	0	1	7	0
MIDDLE ATLANTIC												
New York.....	68	234	35	108	126	126	0	0	0	13	5	12
New Jersey.....	32	26	14	14	25	38	0	0	0	3	4	4
Pennsylvania.....	27	60	13	117	113	110	0	0	0	7	8	8
EAST NORTH CENTRAL												
Ohio.....	20	60	21	111	129	129	0	1	0	5	3	7
Indiana.....	3	11	5	49	32	33	0	0	0	2	7	4
Illinois.....	48	36	36	104	70	120	0	0	0	4	1	8
Michigan.....	16	22	24	71	77	75	0	0	0	5	2	4
Wisconsin.....	49	13	12	61	34	89	0	0	0	0	0	0
WEST NORTH CENTRAL												
Minnesota.....	16	25	19	30	37	49	0	0	0	0	0	0
Iowa.....	34	14	14	44	29	33	0	0	0	0	1	1
Missouri.....	6	17	4	31	14	32	0	0	0	2	0	3
North Dakota.....	1	2	1	3	8	8	0	0	0	0	0	0
South Dakota.....	0	2	1	4	6	13	0	0	0	0	1	0
Nebraska.....	7	1	6	11	33	24	0	0	0	0	0	0
Kansas.....	5	3	11	36	57	62	0	0	0	0	0	1
SOUTH ATLANTIC												
Delaware.....	0	6	2	3	0	4	0	0	0	2	0	0
Maryland.....	1	16	2	14	43	26	0	0	0	2	1	5
District of Columbia.....	6	13	0	9	4	11	0	0	0	0	0	0
Virginia.....	6	21	11	79	42	39	0	0	0	10	3	9
West Virginia.....	2	14	5	114	51	42	0	0	0	2	2	5
North Carolina.....	5	10	2	82	62	113	0	0	0	0	4	5
South Carolina.....	6	0	0	8	4	13	0	0	0	2	0	2
Georgia.....	0	5	1	19	8	40	0	0	0	2	12	11
Florida.....	5	3	1	7	8	8	0	0	0	5	4	1
EAST SOUTH CENTRAL												
Kentucky.....	2	12	6	62	34	55	0	0	0	7	3	5
Tennessee.....	19	7	5	36	51	53	0	0	0	3	2	6
Alabama.....	1	0	3	13	16	21	0	0	0	2	1	3
Mississippi.....	6	1	1	10	10	12	0	0	0	1	2	2
WEST SOUTH CENTRAL												
Arkansas.....	5	3	1	20	5	13	0	0	0	9	3	6
Louisiana.....	0	0	3	10	7	8	0	0	0	2	4	7
Oklahoma.....	12	0	2	20	13	17	0	0	0	2	0	5
Texas.....	20	4	5	57	35	32	0	0	0	10	5	9
MOUNTAIN												
Montana.....	7	0	0	18	10	10	0	0	0	2	1	0
Idaho.....	3	1	0	5	12	12	0	0	0	1	0	0
Wyoming.....	7	0	0	8	10	4	0	1	0	0	0	1
Colorado.....	2	3	1	29	20	18	0	1	0	1	1	1
New Mexico.....	0	1	0	8	3	3	0	0	0	0	1	2
Arizona.....	3	0	0	13	2	3	0	0	0	1	1	1
Utah.....	7	0	2	13	8	8	0	0	0	0	0	0
Nevada.....	0	0	0	0	0	0	0	0	0	0	0	0
PACIFIC												
Washington.....	14	8	8	25	38	28	0	0	0	0	0	2
Oregon.....	4	8	5	19	28	7	0	0	0	2	1	1
California.....	30	10	10	138	114	89	0	0	0	5	7	6
Total.....	549	711	484	1,736	1,565	1,654	0	3	9	121	101	176
41 weeks.....	10,845	16,134	7,435	143,945	156,063	108,609	286	324	658	4,063	4,575	5,689

¹ Period ended earlier than Saturday.

² Including paratyphoid fever reported separately, as follows: Massachusetts 2; New York 2; Ohio 2; South Carolina 1; Georgia 1; Oklahoma 2; Texas 2; California 2.

³ Corrected cumulative total.

Telegraphic morbidity reports from State health officers for the week ended October 13, 1945, and comparison with corresponding week of 1944, and 5-year median—Con.

Division and State	Whooping cough			Week ended Oct. 13, 1945							
	Week ended—		Median 1940-44	Dysentery			Encephalitis, infectious	Rocky Mt. spotted fever	Typhus fever, endemic	Undulant fever	
	Oct. 13, 1945	Oct. 14, 1944		Amebic	Bacillary	Unspecified					
NEW ENGLAND											
Maine.....	12	16	8	0	0	0	0	0	0	0	3
New Hampshire.....	2	0	0	0	0	0	0	0	0	0	0
Vermont.....	14	10	10	0	0	0	0	0	0	0	0
Massachusetts.....	108	45	99	0	2	0	2	0	0	0	0
Rhode Island.....	6	15	19	0	0	0	0	0	0	0	0
Connecticut.....	22	12	37	0	1	0	0	0	0	0	1
MIDDLE ATLANTIC											
New York.....	209	136	281	4	32	0	2	0	0	0	8
New Jersey.....	101	44	89	1	0	0	0	0	0	2	5
Pennsylvania.....	132	108	239	0	0	0	1	0	0	0	2
EAST NORTH CENTRAL											
Ohio.....	97	90	159	0	2	1	0	0	0	0	2
Indiana.....	17	13	12	0	0	4	1	0	0	0	1
Illinois.....	60	47	150	4	10	0	1	0	0	0	3
Michigan ¹	101	69	210	0	5	0	0	0	0	0	2
Wisconsin.....	62	66	137	1	0	0	0	0	0	0	3
WEST NORTH CENTRAL											
Minnesota.....	19	29	41	1	0	0	0	0	0	0	1
Iowa.....	3	1	11	0	0	0	0	0	0	0	0
Missouri.....	13	12	16	0	0	0	0	0	2	0	2
North Dakota.....	0	6	13	0	0	0	0	0	0	0	2
South Dakota.....	0	6	6	0	0	0	0	0	0	0	0
Nebraska.....	0	0	5	0	0	0	0	0	0	0	0
Kansas.....	26	22	29	0	0	0	0	0	0	0	15
SOUTH ATLANTIC											
Delaware.....	1	0	2	0	0	0	0	0	0	0	0
Maryland ¹	26	73	51	0	0	2	0	0	0	0	0
District of Columbia.....	7	4	4	0	0	0	0	0	0	0	0
Virginia.....	10	14	29	3	0	228	0	1	1	0	0
West Virginia.....	25	7	11	0	0	0	0	0	0	0	0
North Carolina.....	58	80	69	1	0	0	0	0	0	3	0
South Carolina.....	74	37	25	5	50	0	0	0	0	9	0
Georgia.....	31	100	14	1	1	0	0	0	1	42	0
Florida.....	1	4	5	2	0	0	0	0	0	3	0
EAST SOUTH CENTRAL											
Kentucky.....	32	6	37	0	0	0	0	0	0	0	0
Tennessee.....	14	12	34	1	0	3	0	0	1	4	2
Alabama.....	7	8	8	0	0	0	1	0	0	9	2
Mississippi ¹				0	0	0	0	0	2	13	5
WEST SOUTH CENTRAL											
Arkansas.....	1	37	26	19	24	0	0	0	5	2	1
Louisiana.....	2	0	1	1	1	0	0	0	0	30	2
Oklahoma.....	2	13	4	1	3	0	0	1	0	0	2
Texas.....	86	99	96	7	300	17	0	0	1	38	8
MOUNTAIN											
Montana.....	6	17	17	0	0	0	0	0	0	0	0
Idaho.....	1	0	0	0	0	1	0	0	0	0	0
Wyoming.....	1	2	4	0	0	1	0	0	0	0	0
Colorado.....	21	9	19	0	0	0	0	0	0	0	0
New Mexico.....	0	3	5	0	4	1	0	0	0	0	1
Arizona.....	7	3	3	0	1	4	0	0	0	0	0
Utah ¹	9	5	16	0	0	0	0	0	1	0	0
Nevada.....	9	2	0	0	0	0	0	0	0	0	0
PACIFIC											
Washington.....	10	17	17	0	0	0	0	0	0	0	2
Oregon.....	4	7	12	0	0	0	0	0	0	0	0
California.....	126	67	175	4	2	0	2	0	0	9	3
Total.....	1,566	1,373	2,600	56	438	262	10	2	14	164	78
Same week 1944.....	1,373			61	599	229	18	2	9	137	64
Average, 1942-44.....	2,115			47	465	153	12	2	9	104	
41 weeks: 1945.....	100,756			1,519	20,983	9,289	521	445	617	3,952	3,780
1944.....	76,482			1,429	18,291	7,273	543	439	459	4,044	3,213
Average, 1942-44.....	124,385		144,350	1,368	14,016	6,490	523	439	624	2,779	

¹ Period ended earlier than Saturday.

² 5-year median, 1940-44.

WEEKLY REPORTS FROM CITIES

City reports for week ended October 6, 1945

This table lists the reports from 87 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Etiophthalmia, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland.....	0	0	---	0	1	0	0	2	1	0	0	4
New Hampshire:												
Concord.....	0	0	---	0	1	0	0	0	4	0	0	0
Vermont:												
Barre.....	0	0	---	0	0	0	0	0	0	0	0	0
Massachusetts:												
Boston.....	3	0	---	0	3	0	12	27	18	0	0	28
Fall River.....	0	0	---	0	1	0	0	0	4	0	0	0
Springfield.....	3	0	---	0	3	0	0	0	2	0	0	2
Worcester.....	0	0	---	0	23	0	4	0	3	0	0	7
Rhode Island:												
Providence.....	0	0	---	0	0	0	1	0	2	0	0	7
Connecticut:												
Bridgeport.....	0	0	---	0	0	0	0	0	0	0	0	0
Hartford.....	0	0	---	0	0	0	0	0	1	0	0	2
New Haven.....	0	0	---	0	0	0	0	0	1	0	0	3
MIDDLE ATLANTIC												
New York:												
Buffalo.....	0	0	---	0	0	1	4	3	7	0	0	17
New York.....	2	2	5	0	12	3	45	27	27	0	5	90
Rochester.....	0	0	---	0	1	1	0	3	4	0	0	7
Syracuse.....	0	0	---	0	0	0	4	0	7	0	0	13
New Jersey:												
Camden.....	1	0	---	0	1	0	0	0	1	0	0	4
Newark.....	0	0	---	0	4	1	3	3	0	0	0	20
Trenton.....	0	0	2	0	0	0	1	1	0	0	0	3
Pennsylvania:												
Philadelphia.....	1	0	1	0	10	1	15	9	22	0	1	74
Pittsburgh.....	3	0	1	1	0	0	5	4	5	0	0	12
Reading.....	0	0	---	0	1	0	0	0	0	0	0	2
EAST NORTH CENTRAL												
Ohio:												
Cincinnati.....	0	0	---	1	0	1	8	2	4	0	0	5
Cleveland.....	1	0	3	0	3	1	6	6	13	0	0	29
Columbus.....	2	0	---	0	0	0	1	0	10	0	0	4
Indiana:												
Fort Wayne.....	0	0	---	0	0	0	2	0	0	0	0	0
Indianapolis.....	3	0	---	0	0	1	1	0	13	0	0	4
South Bend.....	0	0	---	0	0	0	0	0	2	0	0	0
Terre Haute.....	0	0	---	0	0	0	2	0	0	0	0	0
Illinois:												
Chicago.....	1	0	1	0	35	10	20	16	18	0	0	40
Springfield.....	0	0	---	0	0	0	1	0	1	0	0	4
Michigan:												
Detroit.....	7	0	---	0	24	4	6	1	17	0	3	61
Flint.....	0	0	---	0	6	0	3	0	3	0	0	4
Grand Rapids.....	0	0	---	0	3	0	1	0	4	0	0	1
Wisconsin:												
Kenosha.....	0	0	---	0	1	0	0	0	1	0	0	0
Milwaukee.....	0	0	1	1	3	2	4	18	4	0	0	3
Racine.....	0	0	---	0	1	0	0	0	0	0	0	2
Superior.....	0	0	---	0	0	0	0	0	1	0	0	6
WEST NORTH CENTRAL												
Minnesota:												
Duluth.....	0	0	---	0	0	0	0	2	1	0	0	0
Minneapolis.....	1	0	---	1	2	1	4	8	3	0	0	6
Missouri:												
Kansas City.....	2	0	---	0	1	0	4	0	3	0	0	2
St. Joseph.....	0	0	---	0	0	0	0	0	2	0	0	0
St. Louis.....	1	1	1	1	1	1	5	11	2	0	0	6

City reports for week ended October 6, 1945—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
WEST NORTH CENTRAL—continued												
Nebraska:												
Omaha.....	1	0	-----	0	1	0	0	9	1	0	0	0
Kansas:												
Topeka.....	0	0	-----	0	1	0	0	0	3	0	0	0
Wichita.....	1	0	-----	0	0	0	4	0	5	0	0	1
SOUTH ATLANTIC												
Delaware:												
Wilmington.....	0	0	-----	0	0	0	2	1	0	0	1	2
Maryland:												
Baltimore.....	4	0	-----	0	1	0	9	2	11	0	0	28
Cumberland.....	0	0	-----	0	0	0	0	0	0	0	0	0
Frederick.....	0	0	-----	0	0	0	2	0	0	0	0	0
District of Columbia:												
Washington.....	0	0	-----	0	1	0	5	6	10	0	1	15
Virginia:												
Lynchburg.....	0	0	-----	0	0	0	1	0	2	0	0	2
Richmond.....	1	0	-----	0	0	0	1	8	11	0	0	0
Roanoke.....	1	0	-----	0	0	0	0	0	0	0	0	0
West Virginia:												
Wheeling.....	0	0	-----	0	0	0	1	0	0	0	0	0
North Carolina:												
Raleigh.....	0	0	-----	0	0	0	0	0	0	0	0	0
Wilmington.....	1	0	-----	0	0	0	0	0	2	0	0	3
Winston-Salem.....	0	0	-----	1	0	1	3	0	3	0	0	1
South Carolina:												
Charleston.....	1	0	15	0	0	0	0	1	0	0	1	0
Georgia:												
Atlanta.....	0	0	2	0	0	1	4	0	1	0	0	0
Brunswick.....	0	0	-----	0	0	0	1	0	0	0	0	0
Savannah.....	0	0	-----	0	0	0	0	0	1	0	0	0
Florida:												
Tampa.....	0	0	-----	0	0	0	1	1	0	0	2	0
EAST SOUTH CENTRAL												
Tennessee:												
Memphis.....	0	0	-----	0	0	0	2	0	4	0	1	6
Nashville.....	0	0	-----	0	1	0	0	3	0	0	0	3
Alabama:												
Birmingham.....	1	0	-----	0	0	0	1	0	5	0	0	0
Mobile.....	1	0	4	0	0	0	2	0	0	0	0	0
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock.....	0	0	-----	0	1	0	1	0	2	0	1	0
Louisiana:												
New Orleans.....	7	0	2	1	1	0	8	1	2	0	1	0
Shreveport.....	2	0	-----	0	0	0	3	4	0	0	1	0
Texas:												
Dallas.....	4	0	-----	0	0	0	2	0	7	0	0	0
Galveston.....	0	0	-----	0	0	0	1	0	0	0	0	0
Houston.....	3	0	-----	0	0	3	2	2	4	0	2	0
San Antonio.....	1	0	-----	0	0	0	5	0	1	0	0	3
MOUNTAIN												
Montana:												
Billings.....	0	0	-----	0	0	0	1	8	0	0	0	0
Great Falls.....	0	0	-----	0	2	0	0	0	0	0	1	3
Helena.....	0	0	-----	0	0	0	0	0	0	0	0	0
Missoula.....	0	0	-----	0	0	0	0	0	0	0	0	0
Idaho:												
Boise.....	0	0	-----	0	0	0	0	0	0	0	0	0
Colorado:												
Denver.....	6	0	3	1	3	0	6	2	5	0	0	6
Pueblo.....	0	0	-----	0	0	0	2	0	1	0	0	2
Utah:												
Salt Lake City.....	0	0	-----	0	3	0	1	8	0	0	0	1

City reports for week ended October 6, 1945—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococ- cus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
PACIFIC												
Washington:												
Seattle.....	0	0	-----	0	11	1	4	1	1	0	1	2
Spokane.....	0	0	1	0	0	0	4	0	1	0	0	1
Tacoma.....	1	0	-----	0	9	0	0	1	0	0	0	0
California:												
Los Angeles.....	2	0	6	0	5	0	2	9	22	0	0	10
Sacramento.....	0	1	-----	0	3	0	4	0	0	0	0	0
San Francisco.....	0	0	-----	0	26	6	5	3	11	0	0	8
Total.....	60	4	48	8	209	40	252	213	327	0	22	560
Corresponding week, 1944.....	75	-----	35	10	86	-----	244	-----	340	0	23	417
Average, 1940-44.....	70	-----	47	14	197	-----	278	-----	407	0	30	868

* 3-year average, 1942-44.

* 5-year median, 1940-44.

Dysentery, amebic.—Cases: New York 1; Chicago 2; Baltimore 1; Los Angeles, 1.*Dysentery, bacillary.*—Cases: New Haven 2; New York 17; Syracuse 1; Columbus 1; Detroit 1; Wilmington, Del., 1; Baltimore 1; Charleston, S. C., 14.*Dysentery, unspecified.*—Cases: Baltimore 2; Richmond 1; San Antonio 4.*Rocky Mountain spotted fever.*—Cases: Birmingham 1.*Typhus fever, endemic.*—Cases: New York 1; Wilmington, N. C., 3; Charleston, S. C., 1; Atlanta 2; Savannah 7; Tampa 2; Birmingham 5; Mobile 3; Little Rock 1; New Orleans 16 (monthly reports from Charity Hospital); Dallas 1; Houston 1; San Antonio, 1.

Rates (annual basis) per 100,000 population, by geographic groups, for the 87 cities in the preceding table (estimated population, 1943, 34,010,100)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Pollomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England.....	15.7	0.0	0.0	0.0	81	0.0	44.4	75.8	94	0.0	0.0	139
Middle Atlantic.....	3.2	0.9	4.2	0.5	13	3.2	35.6	23.1	34	0.0	2.8	112
East North Central.....	8.5	0.0	3.0	1.2	46	11.6	33.4	26.1	55	0.0	1.8	99
West North Central.....	13.5	2.3	2.3	4.5	14	4.5	38.3	67.6	45	0.0	0.0	34
South Atlantic.....	13.4	0.0	28.5	1.7	3	3.3	50.2	31.8	69	0.0	8.4	85
East South Central.....	11.8	0.0	23.6	0.0	6	0.0	29.5	17.7	53	0.0	5.9	53
West South Central.....	48.8	0.0	5.7	2.9	6	8.6	63.1	20.1	46	0.0	14.3	9
Mountain.....	47.7	0.0	23.8	7.9	64	0.0	79.4	143.0	48	0.0	7.9	95
Pacific.....	4.7	1.6	11.1	0.0	85	11.1	30.0	22.1	55	0.0	1.6	33
Total.....	10.6	0.6	7.4	1.2	32	6.1	38.7	32.7	50	0.0	3.4	87

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended September 22, 1945.—During the week ended September 22, 1945, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brun- swick	Que- bec	On- tario	Mani- toba	Sas- katch- ewan	Al- berta	British Colum- bia	Total
Chickenpox.....		2		17	43	11	22	30	30	155
Diphtheria.....		3	6	22	9	9				49
Dysentery, bacillary.....				10						10
Encephalitis, infectious.....						1				1
German measles.....								2	3	9
Influenza.....		13			8		3		6	30
Measles.....		1	1	10	65	2		15	22	125
Meningitis, meningoco- cus.....	1				2					3
Mumps.....		3			20	6	3	18	15	65
Poliomyelitis.....			2	7	18			2	2	21
Scarlet fever.....	1	4	11	61	36	13	5	25	17	173
Tuberculosis (all forms).....		6	2	146	47	5		15	45	266
Typhoid and paraty- phoid fever.....			1	37	3		1	2	2	46
Undulant fever.....				2	1					3
Venereal diseases:										
Gonorrhea.....	3	28	14	148	245	54	47	56	134	729
Syphilis.....	1	12	7	153	110	10	12	13	29	347
Whooping cough.....		2	2	149	33	5		20	3	214

¹ Includes 2 cases, delayed reports.

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual incidence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

Plague

British East Africa—Kenya.—For the week ended September 8, 1945, 11 cases of plague with 4 deaths were reported in Kenya, British East Africa.

Smallpox

Belgian Congo.—For the week ended September 22, 1945, 94 cases of smallpox were reported in Belgian Congo.

British East Africa—Tanganyika.—For the week ended September 8, 1945, 204 cases of smallpox with 48 deaths were reported in Tanganyika, British East Africa.

Morocco (French).—For the period September 21–30, 1945, 92 cases of smallpox were reported in French Morocco.

Rhodesia, Northern.—For the week ended September 15, 1945, 167 cases of smallpox were reported in Northern Rhodesia.

Typhus Fever

Morocco (French).—For the period September 21–30, 1945, 72 cases of typhus fever were reported in French Morocco, including 2 cases reported in Casablanca.

Yellow Fever

Bolivia—La Paz Department.—For the month of June 1945, 1 fatal case of yellow fever was reported in La Paz Department, Bolivia.

. . .

DEATHS DURING WEEK ENDED OCTOBER 6, 1945

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Oct. 6, 1945	Correspond- ing week, 1944
Data for 93 large cities of the United States:		
Total deaths.....	8,313	8,290
Average for 3 prior years.....	8,508	
Total deaths, first 40 weeks of year.....	358,239	359,809
Deaths under 1 year of age.....	601	649
Average for 3 prior years.....	634	
Deaths under 1 year of age, first 40 weeks of year.....	24,301	24,733
Data from industrial insurance companies:		
Policies in force.....	67,791,071	66,756,380
Number of death claims.....	11,603	11,581
Death claims per 1,000 policies in force, annual rate.....	8.9	9.1
Death claims per 1,000 policies, first 40 weeks of year, annual rate.....	10.2	10.1

FEDERAL SECURITY AGENCY
UNITED STATES PUBLIC HEALTH SERVICE

THOMAS PARRAN, *Surgeon General*

DIVISION OF PUBLIC HEALTH METHODS

G. St. J. PERROTT, *Chief of Division*



The PUBLIC HEALTH REPORTS, first published in 1878 under authority of an act of Congress of April 29 of that year, is issued weekly by the United States Public Health Service through the Division of Public Health Methods, pursuant to the following authority of law: United States Code, title 42, sections 241, 245, 247; title 44, section 220.

It contains (1) current information regarding the prevalence and geographic distribution of communicable diseases in the United States, insofar as data are obtainable, and of cholera, plague, smallpox, typhus fever, yellow fever, and other important communicable diseases throughout the world; (2) articles relating to the cause, prevention, and control of disease; (3) other pertinent information regarding sanitation and the conservation of the public health.

The PUBLIC HEALTH REPORTS is published primarily for distribution, in accordance with the law, to health officers, members of boards or departments of health, and other persons directly or indirectly engaged in public health work. Articles of special interest are issued as reprints or as supplements, in which forms they are made available for more economical and general distribution.

Requests for and communications regarding the PUBLIC HEALTH REPORTS, reprints, or supplements should be addressed to the [Surgeon General, United States Public Health Service, Washington 14, D. C. Subscribers should remit direct to the Superintendent of Documents, Washington 25, D. C.

Librarians and others should preserve their copies for binding, as the Public Health Service is unable to supply the general demand for bound copies. Indexes will be supplied upon request.

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1945

For sale by the Superintendent of Documents, Washington 25, D. C.

Price 10 cents. Subscription price \$4.00 a year

(III)

